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From: [redacted]
Data Reviewer

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Subject: Inorganic Data Validation (S4VM)
Site: Delaware Sand and Gravel
Case: R34236 SDG: DDA-06

OVERVIEW

Case R34236, Sample Delivery Group (SDG) DDA-06, consisted of six (6) drinking water samples analyzed for perfluorinated organic compounds by High Performance Liquid Chromatography/tandem Mass Spectrometry (HPLC/MS-MS). Analyses were performed by Axys Analytical Services, LTD. (AXYS) according to EPA Method 537 utilizing a quantitative isotope dilution-internal standard technique through the Delivery of Analytical Services (DAS) program.

SUMMARY

Data were validated according to organic National Functional Guidelines to the extent possible and is assigned the Superfund Data Validation Label S4VM (Stage_4_Validation_Manual). Areas of concern with respect to data usability are discussed below.

MINOR PROBLEMS

Percent recoveries for isotope $^{13}C_4$-PFBA in samples DDA-06 and P6-UPA were outside the lower control limit (<20%). The positive result and Reporting Limit (RL) for PFBA in these samples may be estimated due to possible matrix interferences and have been qualified "J" and "UJ" respectively, by the reviewer.

Percent recovery for isotope $^{13}C_4$-PFOS in sample DDA-06 was outside the upper control limit (>150%). The positive result for PFOS in this sample may be estimated due to possible matrix interferences and has been qualified "J" by the reviewer.

NOTES

Compounds detected below RLs were not reported by the laboratory.

The method blank associated with the samples in this SDG was free from contamination.

Recoveries for perfluorinated organic compounds in the Ongoing Precision and Recovery (OPR) sample were within control limits.

Recoveries and Relative Percent Differences (RPDs) for perfluorinated organic compounds in the Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses of sample UPA-02D were within control limits.

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
B	The result is presumed a blank contaminant. This qualifier is used only for drinking water samples.
NJ	The analysis indicates the presence of an analyte that has been “tentatively indentified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
R	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
C	This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by Gas Chromatograph/Mass Spectrometer (GC/MS).
X	This qualifier applies to pesticide and Aroclor results when GC/MS analysis was attempted but was unsuccessful.

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